

COLLEGEWIDE COURSE OUTLINE OF RECORD

SCIN 111, PHYSICAL SCIENCE

COURSE TITLE: Physical Science

COURSE NUMBER: SCIN 111

PREREQUISITES: Demonstrated competency through appropriate assessment or earning a grade of “C” or better in ENGL 093 Introduction to College Writing and ENGL 083 Reading Strategies for College or ENGL 095 Integrated Reading and Writing, or ENGL 075 Co-Requisite Integrated Reading and Writing, and MATH 023 Essentials of Algebra I or MATH 080

Mathematics Principles with Algebra

SCHOOL: Arts, Sciences & Education

PROGRAM: Liberal Arts

CREDIT HOURS: 3

CONTACT HOURS: Lecture: 2 Lab: 2

DATE OF LAST REVISION: Fall, 2018

EFFECTIVE DATE OF THIS REVISION: Fall, 2019

CATALOG DESCRIPTION: Introduces physical science concepts and theories pertaining to current applications and trends in physics, chemistry, earth science and astronomy. Includes lab.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Apply the scientific method of inquiry, including analysis based on scientific concepts and observation.
2. Use and convert physical quantities and measurements in both the SI and USCS units systems.
3. Describe the history and origins of scientific concepts and principles.
4. Solve elementary problems in kinematics and dynamics: motion, force, friction, gravitation, energy, heat, work, power, and simple machines.
5. Solve elementary problems involving vibrations, waves, and sound.
6. Solve elementary problems involving electricity and electromagnetism.
7. Illustrate basic scientific concepts in chemistry.
8. Illustrate basic scientific concepts in earth science.
9. Illustrate basic scientific concepts in astronomy.

COURSE CONTENT: Topical areas of study include –

Work and energy

Mechanics

Thermal physics

Waves and sound

Electricity

Newton’s laws of motion

Measurements in physical science

Chemistry

Selected topics from earth science and astronomy

Laboratory experiments will be selected from the topics above.

HOW TO ACCESS THE IVY TECH COMMUNITY COLLEGE LIBRARY:

The Ivy Tech Library is available to students' on- and off-campus, offering full text journals and books and other resources essential for course assignments. Go to <http://www.ivytech.edu/library/> and choose the link for your campus.

ACADEMIC HONESTY STATEMENT:

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

ATTENDANCE

Students are expected to attend and participate regularly in class meetings, online learning activities and other activities assigned as a part of a course of instruction. Faculty are required to report student participation in compliance with institutional policies and federal financial aid guidelines. Faculty and staff shall be sensitive to students' religious beliefs and observances, including an expectation that instructors make reasonable arrangements when a student must miss an exam or other academic exercise due to their religious observance. When notified in advance, and when possible, faculty will make allowances for students to make up missed work.

COPYRIGHT STATEMENT:

Students shall adhere to the laws governing the use of copyrighted materials. They must insure that their activities comply with fair use and in no way infringe on the copyright or other proprietary rights of others and that the materials used and developed at Ivy Tech Community College contain nothing unlawful, unethical, or libelous and do not constitute any violation of any right of privacy.

ADA STATEMENT:

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services.

If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.

Title IX STATEMENT

Ivy Tech Community College is committed to providing all members of the College community with a learning and work environment free from sexual harassment and assault. Ivy Tech students have options for getting help if they have experienced sexual assault, relationship violence, sexual harassment or stalking. This information can be found at <https://www.ivytech.edu/prevent-sexual-violence/index.html>.

If students write or speak about having survived sexual violence, including rape, sexual assault, dating violence, domestic violence, or stalking, federal law and Ivy Tech policies require that instructors share this information with the Campus Title IX Coordinator. The Campus Title IX Coordinator will contact students to let them know about accommodations and support services at the College and in the community as well as options for holding accountable the person who harmed them. When contacted, students are not required to speak with the Campus Title IX Coordinator.

If students do not want the Title IX Coordinator notified, instead of disclosing this information to their instructor, students can speak confidentially with certain individuals at the College or in the community. A list of these individuals can be found at <https://www.ivytech.edu/prevent-sexual-violence/index.html> under Confidential Employees and/or Community Resources.